

**WHAT IS CLAIMED IS:**

1           1.       A method of using a service discovery device to control devices within  
2 a home network from a remote device, comprising:  
3                   providing an IP address to each device located within the home  
4 network;  
5                   making at least one HTTP request to each of the IP addresses;  
6                   receiving information from a HTML page on each of the devices; and  
7                   generating a web page containing the received information,  
8                   wherein the web page is accessible from the remote device in response  
9 to a request from the remote device to the service discovery device, and wherein the  
10 generated web page includes a list of links to device web pages for each of the devices  
11 located within the home network, the list of links being actuatable from the remote  
12 device, enabling a user to control each of the devices.

1           2.       The method of claim 1, further comprising recording the received  
2 information on the service discovery device.

1           3.       The method of claim 1, further comprising, upon one of the links being  
2 actuated on the remote device, generating a device web page corresponding to the  
3 actuated link, wherein the device web page is accessible from the remote device, and  
4 wherein actuation of content on the device web page results in manipulation of the  
5 respective device.

1           4.       The method of claim 1, further comprising:  
2                   receiving a MAC address for each of the devices within the home  
3 network; and  
4                   using the received MAC addresses to update the list of links on the  
5 web page when a change occurs regarding the devices within the home network.

1           5.       The method of claim 4, wherein the change includes the addition of a  
2 new device to the home network.

1           6.       The method of claim 4, wherein the change includes the removal of a  
2 device from the home network.

1           7.       A computer program product for using a service discovery device to  
2 enable communication between devices within a home network and a remote device,  
3 comprising:

4                   computer code for providing IP address to each device located within  
5 the home network;

6                   computer code for making at least one HTTP request to each of the IP  
7 addresses;

8                   computer code for receiving information from a HTML page on each  
9 of the devices; and

10                  computer code for generating a web page containing the received  
11 information,

12                  wherein the web page is accessible from the remote device in response  
13 to a request from the remote device to the service discovery device, and wherein the  
14 generated web page includes a list of links to device web pages for each of the devices  
15 located within the home network, the list of links being actuable from the remote  
16 device to enable a user to control each of the devices.

1           8.       The computer program product of claim 7, further comprising  
2 computer code for recording the received information on the service discovery device.

1           9.       The computer program product of claim 7, further comprising  
2 computer code for, upon one of the links being actuated on the remote device,  
3 generating a device web page corresponding to the actuated link, wherein the device  
4 web page is accessible from the remote device, and wherein actuation of content on  
5 the device web page results in a corresponding manipulation of the respective device.

1           10.      The computer program product of claim 7, further comprising:  
2                   computer code for receiving a MAC address for each of the devices  
3 within the home network; and

4 computer code for using the received MAC addresses to update the list  
5 of links on the web page when a change occurs regarding the devices within the home  
6 network.

1 11. The computer program product of claim 10, wherein the change  
2 includes the addition of a new device to the home network.

1 12. The computer program product of claim 10, wherein the change  
2 includes the removal of a device from the home network.

1 13. An electronic device for enabling communication between devices  
2 within a home network and a remote device, comprising:  
3 a processor for processing information; and  
4 a memory unit operatively connected to the processor, the memory unit  
5 including:

6 computer code for providing an IP address to each device  
7 located within the home network;

8 computer code for making at least one HTTP request to each of  
9 the IP addresses;

10 computer code for receiving information from a HTML page  
11 on each of the devices; and

12 computer code for generating a web page containing the  
13 received information,

14 wherein the web page is accessible from the remote device in  
15 response to a request from the remote device to a service discovery device, and  
16 wherein the generated web page includes a list of links to device web pages for each  
17 of the devices located within the home network, the list of links being actuatable from  
18 the remote device to enable a user to control each of the devices.

1 14. The electronic device of claim 13, wherein the memory unit further  
2 comprises computer code for recording the received information on the service  
3 discovery device.

1           15.     The electronic device of claim 13, wherein the memory unit further  
2 comprises computer code for, upon one of the links being actuated on the remote  
3 device, generating a device web page corresponding to the actuated link, wherein the  
4 device web page is accessible from the remote device, and wherein actuation of  
5 content on the device web page results in a corresponding manipulation of the  
6 respective device.

1           16.     The electronic device of claim 13, wherein the memory unit further  
2 comprises:  
3                     computer code for receiving a MAC address for each of the devices  
4 within the home network; and  
5                     computer code for using the received MAC addresses to update the list  
6 of links on the web page when a change occurs regarding the devices within the home  
7 network.

1           17.     A system for enabling communication between a remote device and at  
2 least one home network device, comprising:  
3                     a remote electronic device;  
4                     a home network including at least one home network device and a  
5 service discovery device, the service discovery device including:  
6                     computer code for providing an IP address to each of the at  
7 least one home network device located within the home network;  
8                     computer code for making at least one HTTP request to each IP  
9 address;  
10                    computer code for receiving information from a HTML page  
11 on each of the at least one device; and  
12                    computer code for generating a web page containing the  
13 received information,  
14                    wherein the web page is accessible from the remote electronic  
15 device in response to a request from the remote device to the service discovery  
16 device, and wherein the generated web page includes a list of links to device web

17 pages for each of the at least one device located within the home network, the list of  
18 links being actuatable from the remote device to enable a user to control each of the  
19 devices.

1 18. The system of claim 17, wherein the service discovery device includes  
2 computer code for, upon one of the links being actuated on the remote device,  
3 generating a device web page corresponding to the actuated link, wherein the device  
4 web page is accessible from the remote device, and wherein actuation of content on  
5 the device web page results in a corresponding manipulation of the respective device.

1 19. The system of claim 17, wherein the service discovery device includes:  
2 computer code for receiving a MAC address for each of the at least one  
3 home network device; and  
4 computer code for using the received MAC addresses to update the list  
5 of links on the web page when a change occurs regarding the at least one home  
6 network device.

1 20. The system of claim 17, wherein the service discovery device is  
2 located within an access point, the access point being in communication with both the  
3 remote device and the at least one home network device.